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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/477,422 | 01/04/2000 | JON C. SCHAEFFER | 13DV-13434 | 9215 |

7590 07/06/2005

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EXAMINER

MARKHAM, WESLEY D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1762

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,422

Applicant(s)

SCHAEFFER, JON C.

Examiner

Wesley D. Markham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13, 16-18, 73 and 112 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-13, 16-18, 73 and 112 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application on 5/4/2005 after appeal to the Board of Patent Appeals and Interferences (notice of appeal filed on 11/5/2004), but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/4/2005 has been entered.

Response to Amendment

2. Acknowledgement is made of the amendment filed by the applicant on 5/4/2005, in which independent Claim 8 was amended and Claim 47 was canceled. **Claims 8 – 13, 16 – 18, 73, and 112** remain pending in U.S. Application Serial No. 09/477,422, and an Office action on the merits follows.

Drawings

3. The drawings filed on 1/4/2000 are objected to because (1) the words, lines, and reference numbers in Figures 2A, 2B, and 3 are hand-written and unclear (i.e., the lines are not all sufficiently uniform and well-defined, as required by 37 CFR 1.84(l)), and (2) Figure 4 is too dark, thereby making it impossible to distinguish between the

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different "Relative Life" sections of the legend and the graph. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. The rejection of Claim 47 under 35 U.S.C. 112, first paragraph, set forth in the previous Office action (i.e., the final Office action mailed on 5/5/2004), is withdrawn in light of the applicant's cancellation of Claim 47.

Claim Observations

6. Claim 8 requires, in part, "diffusing a platinum from the layer of platinum into the substrate surface". The word "a" between "diffusing" and "platinum" appears to be a typographical error.
7. As amended, Claim 8 requires, in part, "wherein the surface region comprises a surface, distant from the substrate surface, and which surface region includes aluminum content and platinum content which is relatively high adjacent to the surface and decreases with increasing depth into the surface region and the substrate." It is clear to one skilled in the art that "the surface" (underlined in the phrase above) refers to the surface of the surface region distant from the substrate surface, not the substrate surface.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. **Claim 8** is rejected under 35 U.S.C. 102(b) as being anticipated by Conner et al. (ASME article) for the reasons set forth in the previous Office action. Please note that amended Claim 8 requires, "wherein the surface region comprises a surface, distant from the substrate surface, and which surface region includes aluminum content and platinum content which is relatively high adjacent to the surface and decreases with increasing depth into the surface region and the substrate." This limitation is clearly disclosed by the "CVD PLATINUM ALUMINIDE" graph in Figure 3 of Conner, which shows that the surface region includes a relatively high aluminum and platinum content adjacent to the surface, the Al and Pt content decreasing with increasing depth into the surface region and the substrate.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Conner et al. for the reasons set forth in the previous Office action.

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12. **Claims 9, 10, 73, and 112** are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner et al. in view of Duderstadt et al. (USPN 5,238,752) for the reasons set forth in the previous Office action.

13. **Claims 12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner et al. in view of Wukusick et al. (USPN 5,100,484) for the reasons set forth in the previous Office action.

Double Patenting

14. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970). A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

15. **Claims 11 and 16 – 18** are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of Claims 11 and 16 – 18 of copending Application No.

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09/244,578. Claims 11 and 16 – 18 of each application are identical in scope. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

16. **Claim 16** is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of Claim 16 of copending Application No. 10/375,537, which has been withdrawn but not canceled. Claims 16 in each application are identical in scope. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

17. **Claim 16** is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of Claim 16 of copending Application No. 10/611,223, which has been withdrawn but not canceled. Claims 16 in each application are identical in scope. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed

terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. **Claims 8 – 10, 12, 13, 73, and 112** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 8 – 10, 12, 13, 71, and 110 of copending Application No. 09/244,578.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims only differ in the overlapping ranges of the aluminum and platinum concentrations in the platinum-aluminide surface region. Therefore, the method taught by Claims 8 – 10, 12, 13, 71, and 110 of copending Application No. 09/244,578 would have motivated one of ordinary skill in the art to perform the method recited in Claims 8 – 10, 12, 13, 73, and 112 of the instant application. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

20. Claims 16 – 18 have been rejected under 35 U.S.C. 101 (statutory double patenting), but no prior art has been applied against the claims.

21. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, alone or in combination, does not teach or suggest using an aluminum source having an activity of about 40 to about 50 atomic percent as measured in a pure nickel foil in the method of preparing an article having a platinum aluminide surface region recited in Claims 16 – 18.

Response to Arguments

22. Applicant's arguments filed on 5/4/2005 have been fully considered but they are not persuasive.

23. Regarding both the 35 U.S.C. 102 and 103 rejections based, at least in part, on Conner, the applicant argues that the "CVD PLATINUM ALUMINIDE" graph in Figure 3 of Conner depicts a Pt weight % that increases with increasing depth at several points, thereby failing to teach or suggest a surface region / aluminide layer which includes Al content and Pt content which is relatively high adjacent to the surface and decreases with increasing depth into the surface region and the substrate.

24. In response, this argument is not persuasive. Specifically, the applicant's argument appears to be based on an overly narrow interpretation of the claimed limitation (see independent Claims 8 and 73) that the surface region / aluminide layer "includes (the) aluminum content and (the) platinum content which is relatively high adjacent to the surface and decreases with increasing depth into the surface region / aluminide layer and the substrate". To begin, the examiner notes that Office

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personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure (*In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997)). In this case, the "CVD PLATINUM ALUMINIDE" graph in Figure 3 of Conner clearly shows that the Pt and Al concentrations are "relatively high" adjacent to the surface (e.g., the Pt and Al concentrations are higher at and near the surface (around 20%) than they are remote from the surface (less than 15% at a depth of 40 microns or more from the surface)). Additionally, the overall trend depicted in the "CVD PLATINUM ALUMINIDE" graph in Figure 3 of Conner is clearly one of decreasing Al and Pt concentration with increasing depth, as required by the claims. Nothing in the claims of the instant application, when read in light of the specification, requires that the Pt and/or Al concentration of the surface region must decrease with increasing depth at every single point throughout the region, as the applicant appears to argue. Interpreting the claims this narrowly would be contrary to the Office policy of giving claims their broadest reasonable interpretation.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meelu (USPN 5,500,252) and Rickerby et al. (USPN 5,645,893) are both cited to show method of producing platinum aluminide coatings on Ni-based superalloy components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D. Markham whose telephone number is (571)

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272-1422. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.

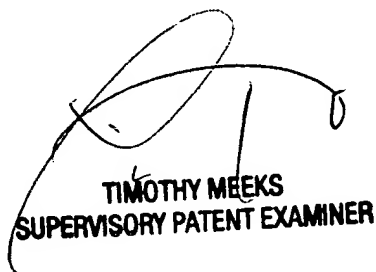
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WDM

Wesley D Markham
Examiner
Art Unit 1762



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER